PIT & QUARRY

JULY 1984

Cement reports

PIT & QUARRY

page 36

page 56

page 72

page 53

EDITORIAL

35 **A matter of priorities** ..... **William J. Young**

SPECIAL ANNUAL CEMENT SECTION

56 **The influence of ball-mill speed on energy expenditure and throughput capacity** ..... **P. Tiggesbaumker and M. Muller**

66 **China Cement moves Hong Kong mountain to build plant**
Installs reinforced suspension preheater process and uses fly ash from neighboring power plant

72 **An older plant is modernized with microprocessor technology** ..... **Sandy Herod**
Lohja develops digital quality control for cement kilns

78 **Cement plant is cornerstone for industrial development in northern Sumatra**

83 **U.S. cement: recovering as a changed industry** ..... **Roy A. Grancher**
1983's upturn gives producers shot of optimism

90 **New dry process line nearly doubles production at island plant** ..... **Lars Falk Jensen**
Davao Union Cement expands market area to Southeast Asia

96 **Lower carbon steel for kiln chains?** ..... **K. N. Tandon**
Preliminary study indicates idea merits a look

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CONTENTS/JULY 1984 VOL. 77 NO. 1

PLANTS

36 **Umzimkulu Lime upgrades calcite processing** ..... **Peter Holz**
South African plant uses flotation cells for beneficiation

SAFETY

44 **Automated plants present new safety hazards** ..... **Dick Seago**
Hot mix facilities demonstrate need for added alertness

48 **New NCSA Safety Program recognizes 362 plants**
Revised guidelines enlarge winners' circle

DEPARTMENTS

7 The National Scene
13 Industry News
16 Coming Events
30 Truck Topics
33 Through the Side Mirror
105 New Products, Services
111 Useful Literature
115 Manufacturers' News
118 Classified Ads
121 Readers' Service Card
130 Advertisers' Index
130 Advertising Sales Offices

AND NEXT MONTH

Our first-ever Buyer's Guide, a complete listing of manufacturers, products, and services for nonmetallic mineral operations.

ON THIS MONTH'S COVER

Workers at Southwestern Portland Cement Co's Victorville, Calif., plant perform maintenance inside a kiln. (Photo courtesy of Southdown, Inc.)

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MEMBER
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Comparison of 1984/1983 Construction Contract Values*

	4 Mos. 1984 (000,000)	4 Mos. 1983 (000,000)	Cumulative Percent Change
Nonresidential building	$20,852.2	$18,176.9	+ 15
Residential building	31,839.6	25,827.5	+ 23
Nonbuilding construction	10,565.5	11,139.8	– 5
Total construction	$63,257.3	$55,144.1	+ 15

Dodge Index
(1977 = 100, Seasonally Adjusted)
February 1984 ..... 150 March 1984 ..... 144 April 1984 145

**Based on statistics compiled by F.W. Dodge Div., McGraw-Hill Information Systems*

should be sent to Office of Standard Reference Materials, Room B311, Chemistry Building, National Bureau of Standards, Washington, D.C. 20234.

Ideal shifting Potash Division to Canada

Ideal Basic Industries, Inc., has announced plans to transfer its Canadian potash operations to a new Canadian subsidiary, Potash Company of America, Inc. (PCA). Ideal executives also authorized the company's participation in the filing of a preliminary prospectus by PCA with the Ontario Securities Commission. The planned offering of voting convertible preferred shares to the Canadian

Forum

Dear Ms. Murphy:

On bid rigging and other bad image publicity for highway contractors, your editorial in May's *Pit & Quarry*:

If the majority of those in the industry are not offenders, then the solution is that they must blow the whistle on those who are. Saying nothing, i.e. closing ranks, is to band all as birds of a feather.

John W. Taber
Manager
Darby Spar, Ltd
Darby, Mont.

Dear Ms. Murphy:

You invited comment on your perception of the ills of the construction industry. I see them from a different perspective, probably due to longer exposure to the scene (a euphemism for greater age).

First, I think that what you observe as related to the construction industry now, also relates to all our institutionalized society. Criticism by media is rampant. The resulting loss of esteem of medical, legal, public accounting, teaching, and other professions in one part of the spectrum to labor productivity and unionism in another, affects us all, and we (as both critic and victim) are tarnished by it.

Second, our legislative bodies are so paralyzed by the same criticisms that their safest action is inaction.

Third, (and directly related to highway construction) the increasing dependence on federal money removes the direct link between need, as perceived by the user, and action, as taken by his directly elected state legislature. That probably is the biggest change of the past 30 years.

One suggestion that, if implemented, might help the industry and public alike, is consideration of total life cycle cost of construction when doing the original design and construction of the facilities. This would include the social costs (detour costs, time delays, accidents, etc.) as well as actual costs of both continuing maintenance and ultimate removal with disposal. This approach could justify a higher quality job, albeit at more cost.

One other personal pet peeve might be appropriate to share—the trend toward high fineness, high strength cements, which permits lower cement factor concrete of diminished durability, at a very high "social cost," to get a direct saving in the range of 2% of first cost.

Thanks for the invitation.

Karl Hauser, P.E.
Manager
Corporate Development
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U.S. cement: recovering as a changed industry

1983's upturn gives producers shot of optimism

By Roy A. Grancher

Upturn was the most encouraging word describing United States cement shipments last year. Since entering this decade of promise, the industry had experienced only consecutive annual declines in demand. Along with that decline, costs continued to mount, company debt burdens grew significantly, and many assets were sold or redeployed. Indeed, the solid 10% tonnage gain in 1983 provided a much-needed shot of optimism in regard to the remainder of the '80s.

Out of necessity, the industry's emphasis remained on mere survival. The intensely competitive market has featured destructive pricing, forced cutbacks in plants and personnel, and organizational restructuring. Sales strategies centered on greater terminal activity to improve volume levels; product lines were broadened by blends, mixes, and types such as oil well cement.

On the other hand, indications exist that sights were being raised for more positive production results. Increasing attention is being paid to modifying existing plants, with specific process and system upgrading for more efficiency; however, the net result will be facility change that is not likely to generate much additional capacity. This situation lends support to the expectation that sustained recovery can lead again to a national requirement outpacing available domestic output. In other words, another cement shortage later this decade.

Gifford-Hill's ongoing capital improvement program at its Oro Grande facility has included raw and finish mills, electrical power distribution, instrumentation, and controls for its five kilns. Producers are spending now in order to gain better cost control for the future.

Shipments and supply

The cement industry's gallows humor for the '80s can be detected in this line: "If the pessimists aren't happy now they never will be!" Two years ago, the market's bottom fell out when a 20-year low in shipments was recorded to go with a cement ROI of less than 1%. Last year's volume gain of more than 6 million tons, for a total of nearly 71 million tons, was a much needed morale booster.

Although the tonnage remained substantially below the 85 million level reached in both 1978 and '79 (the industry's most recent shortage experience), indications were that demand finally was going in

the right direction. As Keystone Cement's annual report stated: "1983 was the turnaround year!"

The rays of cautious optimism are being reflected in other industry statements as well. While stringent cost controls remain the rule, numerous references were made to plant locations being in future growth areas, especially the Sunbelt states. Forecasters call for rising cement consumption over the next 5 years, not to the degree once anticipated for the '80s, yet substantial enough to create another imbalance in the domestic demand and supply relationship. A 90 million ton cement requirement 5 years hence can have available to service it a production capability not much higher than today's approximately 85 million tons of clinker capacity.

Cement's 3-year decline forced the shaking out of obsolete plants and inefficient kilns. Few major industry programs are committed to replacing this lost production, much less provide for additional demand. With many producers posting losses or severe drops in net income and a market price structure best described as depressed, both the motivation and resources are lacking for making large capital expenditures.

Only one major plant project is scheduled for completion in 1984, Southwestern Portland Cement's $100 million modernization and expansion of its Victorville, Calif., operation. The net result will be a 300,000 ton gain in capacity.

Three other announced capacity expansion programs—in California by Gifford-Hill & Co. and Monolith Portland Cement, and in Arizona by California Portland Cement—have been delayed or placed on hold. Of the five totally new plant start-ups announced in the past few years, only Florida Crushed Stone's 600,000-ton Brooksville operation appears to be progressing. The others remain in a holding pattern generally seeking financial help and economic recovery for justification.

Distribution terminal activity has increased as producers attempt to generate more tonnage by extending the marketing reach of existing plants. Pictured here is Ideal Basic Industries' Salina, Utah, cement terminal completed a year ago.

Yet the fact remains that producers must spend money in order to control and reduce costs. The trend in U.S. plant program priorities is selective and specific spending in each phase of production and material handling. This means company investment that can be justified by direct per ton savings today rather than in the future.

With the predicted gap between supply and demand acting as a carrot on a stick for producers and despite the limited present returns, cement supply in the future is a concern, an opportunity, and a basis for change for producers. Basic company positioning and product approaches as to where their individual industry participation lies is the fundamental business decision both domestically and abroad.

An aging industry

The U.S. cement industry is showing its age despite impressive progress made since the oil embargo 10 years ago. Fig. 1 depicts the bell-shaped curve of year and type of that year's kilns. The hump of its units is between 20 and 33 years ago; the obvious implication is in support of the further plant investment necessary to improve productivity.

More definitive of this is the changed ranking that has taken place in just the past 5 years among the top baker's dozen cement companies (Fig. 2). There has been a dramatic repositioning and a revealing comparison is provided by examining each firm's plants by process.

Lone Star Industries remains the highest ranking cement company, its capacity significantly larger through its $267 million acquisition of Marquette. Ideal Basic Industries has fallen victim to outstanding debt, incurred mostly through the $330 million-plus construction of its new 1.5 million-ton Alabama facility. Company efforts to convert several operating assets to cash have included plant and distribution terminal sales.

Now in second place is General/Lafarge, whose business plan defines the challenges faced by the cement industry. The plan combines "aggressive marketing in growth areas, efficient production through process improvements, and alert attention to cost and expense control." Note that the three largest firms have a total of 17 dry process plants, but also have 20 wet process installations. This latter group represents upwards to one-third of the remaining wet plants in the industry.

Martin Marietta, the fifth-ranked producer in 1979, has disappeared entirely from industry listings by closing or selling all its plants. The company's annual report stated that when it became apparent the organization needed to sell assets to reduce debt "the cement company was identified among the assets that probably were salable."

Recently three companies have moved significantly in the U.S. cement market—Ash Grove, Southwestern, and Moore McCormack. Ash Grove, once the industry's 18th-ranked company, acquired 22nd-ranked Oregon Portland and bought Lone Star's wet process Seattle plant to develop into a strong Northwest marketer. Southwestern obtained 1 million tons of additional capacity early this year by acquiring the Colorado facility of Martin Marietta. Southwestern also signed a 5-year lease with an option to buy Marietta's Utah operation.

Moore McCormack doubled capacity of its Florida plant in 1982, then in a $50 million purchase bought the dry process Knoxville, Tenn., operation from Ideal Basic, along with distribution terminals in North Carolina and Tennessee. The company shows its faith in the country's effort to rebuild its infrastructure through its advertising slogan, "America is about to invest in cement. Moore McCormack is ready!"

Elsewhere, Louisville Cement closed and then sold one of its three plants (representing more than ¼ of its capacity), to make an unsuccessful bid for a Kentucky pottery clay maker. Giant Cement's long time family control passed on to two private investment groups. Three top producers—Lone Star, Ideal Basic, and Kaiser Cement—announced decentralizations. At least 10 cement entities changed presidents, a sure sign of industry revision. Yet Centex stated that it contin-

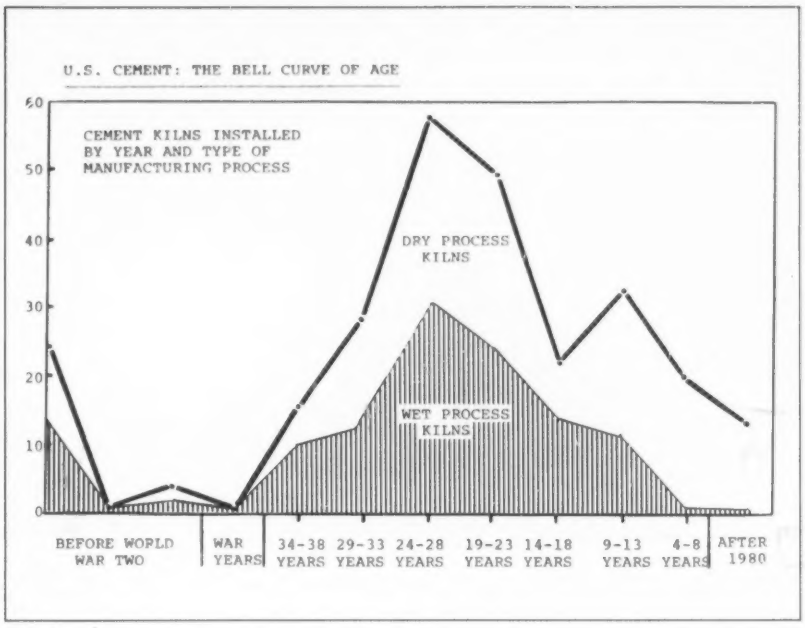

Fig. 1

ued to be among the most profitable companies in the industry because of its continuity of management!

The battlefield—price

The first line of cement's competitiveness (and profit) is pricing, and there has been general industry agreement that product was being sold in a most disastrous manner. Adjectives used in describing the price environment ranged from soft, under substantial pressure, and deteriorated to fierce and at inordinately low levels. Obviously this precluded any chance of being able to pass along increased costs to the consumer.

The best quote in regards to pricing appeared in Northwestern States' annual report: "If the events of 1983 prove nothing else, they have demonstrated beyond any doubt that the cement industry is totally incapable of intelligently pricing its products in a declining market. The demand for cement is virtually inelastic, and price will not in and of itself expand or diminish the amount consumed in the market place. It can and does redistribute market share, but at a cost so exorbinant that it is incomprehensible by any semblance of rational or sound business practices."

Competition also made some companies expand the distribution reach of existing production units in the hope that tonnage generated could compensate for lower pricing.

Lafarge bought terminals in New Orleans, La., and Oswego, N.Y., opened one in Corpus Christi, Tex., and currently is completing two others, in Columbus, Ohio, and Buffalo, N.Y. South Dakota Cement opened terminals in Casper, Wyo., and Denver, Colo. Gifford-Hill expanded its storage capacity in Phoenix, Ariz., fivefold. Many other companies made similar moves.

Product line diversification received attention. Oil well cement had been added at the Southern Division of Martin Marietta before Blue Circle's bought it. The South Dakota cement plant also added production of oil well cement, as did Gifford-Hill at its Midlothian, Tex., plant. Louisville Cement introduced Brixment, a masonry cement, to its Logansport, Ind., output. Arkansas Cement acquired the product Quikcrete, a do-it-yourself concrete mix, as well as adding oil well cement to its product line.

Imports and foreign involvement

As to be expected during depressed economic periods, domestic efforts against cement imports accelerated. Charges of dumping, a call for duties, and American protectionism all were brought to bear against overseas volume. But the result for 1983 may be indicative of what lies ahead. Imports rose to more than 4 million tons, up by 40% over the 12-year low that had been reported just the previous year.

Kaiser Cement in particular, supported by several other West Coast producers and industry unions, led vigorous campaigns against Australian and Japanese tonnages. They claimed the product was being dumped into the U.S. at less than fair value. Charges also were introduced against Mexican shipments to impose countervailing duties due to their governmental fuel subsidies. Investigations also followed alleged dumped Korean cement shipments that arrived in California and were purchased in Hawaii.

To the north, a different anti-import scenario developed. The Gas-Tax Act of 1982, which strengthened "Buy America" laws, had been extended to require that 100% U.S.-made cement be used in federally-funded projects. Canadian producers, who have built modern plants along the border to service American consumption, faced preclusion from participation in U.S. demand.

The net result of these actions has been an International Trade Commission ruling that the industry is not being injured by Far East imports, and an act of Congress exempting cement from the restrictions applied by the Surface Transportation Assistance Act.

Canada remained last year's prime exporter with just more than half the total; following were Mexico, Spain, France, and Colombia. Where once Detroit, Los Angeles, and Seattle were top import destinations, the present rankings have Buffalo, St. Albans, Tampa, and Miami at the top.

With minimal industry capacity addition but forecasted increasing cement demand, the resulting supply gap again can be filled by imports. This view is supported by Lone Star's realistic approach. Last year, the company acquired a 50% interest in Pacific Coast Cement's Long Beach import terminal that can move 600,000 tpy.

U.S. CEMENT: FIVE YEARS OF THE TOP BAKER'S DOZEN COMPANIES, AND THEIR PLANTS

1979 Ranking*	Cement Plants Wet	Dry	Present Ranking**	Cement Plants Wet	Dry
1. Lone Star	7	4	1. Lone Star	7	10
2. Ideal Basic	10	3	2. General/Lafarge	6	4
3. Gifford-Hill	5	2	3. Ideal Basic	7	3
4. General Portland	7	1	4. Gifford-Hill	2	4
5. Martin Marietta	3	5	5. Lehigh/Heidelberg	1	7
6. Medusa	1	4	6. Kaiser Cement	2	3
7. Marquette	6	4	7. Southwestern	2	5
8. Universal Atlas	2	5	8. Dundee/Holderbank	3	—
9. Kaiser Cement	4	1	9. California Portld.	—	3
10. National Gypsum	—	2	10. National Gypsum	—	2
11. Dundee/Holderbank	3	—	11. Medusa	—	3
12. Lehigh Portland	—	5	12. Ash Grove-Oregon	4	2
13. California Portld.	—	3	13. Moore McCormack	—	4

**Gifford-Hill* had bought Amcord.
Heidelberg bought No. 12 ranked Lehigh and its five dry plants, then acquired Universal Atlas in 1980.
Lafarge purchased General in 1981.
Lone Star acquired Marquette in 1982.
National Gypsum had agreed to sell its cement division to General Dynamics for $100 million. However the deal did not go through, and early in 1982 the company announced its decision to continue in the cement business.
Dundee does not include Independent Cement/St. Lawrence/Holderbank.
***Lone Star* agreed to sell Seattle to Ash Grove and Catskill to Independent.
Ideal closed its North Carolina plant, sold its Tennessee plant, and is under a sale-lease arrangement in New Mexico.
Gifford-Hill Detroit is held for sale.
Southwestern bought Martin Marietta's Colorado plant and is leasing with option to purchase the Utah plant.
Martin Marietta sold three plants to Blue Circle and one to Cementia Holdings in 1983. All others have been sold or closed.
Ash Grove merged with Oregon Portland, then bought Lone Star's Seattle plant.
Moore McCormack closed two wet plants in Tennessee, then bought Ideal's dry process Tennessee plant.

Fig. 2

With a strategy defined as controlling imports rather than being victimized by them, more Lone Star moves can be expected.

Another facet of this renewed import interest is Blue Circle's action in Arizona. The British group bought three large ready mixed concrete companies in that state; reportedly, the cement for these operations will be shipped from Blue Circle's new 1 million ton Hermosillo plant in Tolteca, Mexico, 240 miles from Tucson. This is the same supply source for the San Diego import terminal that Blue Circle acquired from Melwire in 1983 in their development of a Southwest pincer strategy.

Other actions in U.S. cement's internationalization included:

- Blue Circle and Cementia Holdings of Switzerland acquired the Alabama, Georgia, Iowa, and Oklahoma cement plants of Martin Marietta for $170 million.
- St. Mary's bought two Wisconsin terminals from Lehigh.
- Independent Cement acquired the Massachusetts terminal of Martin Marietta, then agreed to buy Lone Star's Catskill, N.Y. plant and associated terminal facilities.
- In Florida, Ideal Basic's Palm Beach terminal was purchased by Mexican interests, creating a new company, Eagle Cement.
- Saudi Arabian interests continued construction of a 600,000-tpy Houston importing terminal called Falcon Cement.
- Norcem sold half of its New York City cement terminal to Spain's Cia. Valenciana.

The most interesting acquisition of the year, however, may have been by the 2,000-plus members of the Passamaquoddy Tribe of Maine, who now are majority owners of Martin Marietta's 400,000-tpy cement facility in Thomaston.

Problems for producers

Recession choked off major industry spending for new and more efficient plant capacities. Yet the recognition exists as to the importance of improved production cost structures, and this is where most ongoing expenditure is being directed.

The power of positive thought is appearing in many company statements and published reports. Recognition is growing that, without a strong stand in regard to pricing its product, improved profit margins cannot be achieved. Yet specific clouds do appear above cement production. One is legal, the second an apparent loss of memory and perspective.

An unfortunate and costly legacy confronting the industry is antitrust class action litigation dating back to the 1970s. Charges of price fixing were made against the Portland Cement Association and 50 cement companies. Hopefully this unpleasant Sword of Damocles hanging over U.S. cement will be banished this year; depostion taking now is reaching the hearing stage before a Los Angeles judge.

The second cloud concerns absolving management of any responsibility for the industry's unhappy past. Several statements have been made saying, in effect, that cement executives overexpanded the industry in a euphoria of unlimited growth, that blame is not theirs because everyone was doing it, and that it isn't fair to be critical in retrospect.

The commentaries are disturbing by their very appearance. To believe that leadership runs after euphoria or any other pipe dream is misconception of what effective management comprises. To justify lemming-like instinct is inexcusable. Hindsight often can find value in explaining mistakes that foresight should have avoided. In making the industry's decisions, the choice was between the executive or the pressure, and in cement's past the latter won.

We cannot back into tomorrow. With cyclical recovery underway, differing strategies are being initiated as to market share, distribution reach, product line, volume, and the price for obtaining each. The saying goes that experience enables us to recognize a mistake when we make it again; for the cement industry's best interests, an instant replay of yesterday's cement experience is a prospect to be avoided. ●

Roy A. Grancher is a long time participant and observer of the portland cement industry.